What is claimed is:

1. A wireless optical system which comprises a transmitting section having a light-emitting element and a transmission light condenser lens, and a receiving section having a light-detecting element and a received light condenser lens, and which communicates with a counterpart device, the wireless optical system further comprising:

scanning means which scans said light-emitting element relative to said transmission light condenser lens; and

control means which controls a transmission direction of transmission light transmitted from said light-emitting element by driving said scanning means.

2. A wireless optical system which comprises a transmitting section having a light-emitting element and a transmission light condenser lens, and a receiving section having a light-detecting element and a received light condenser lens, and which communicates with a counterpart device, the wireless optical system further comprising:

scanning means which scans said light-detecting element relative to said received light condenser lens; and

control means which controls a reception direction of received light received by said light-detecting element by

driving said scanning means.

3. A wireless optical system which comprises a transmitting section having a light-emitting element and a transmission light condenser lens, and a receiving section having a light-detecting element and a received light condenser lens, and which communicates with a counterpart device, the wireless optical system further comprising:

scanning means which scans said light-emitting element relative to said transmission light condenser lens, and scans said light-detecting element relative to said received light condenser lens; and

control means which controls a transmission direction of transmission light transmitted from said light-emitting element by driving said scanning means, and controls a reception direction of received light received by said light-detecting element by driving said scanning means.

4. A wireless optical system which comprises a transmitting section according to claim 1, said scanning means two-dimensionally scans said light-emitting element.

5. A wireless optical system which comprises a transmitting section according to claim 2, said scanning means two-dimensionally scans said light-detecting element.

6. A wireless optical system which comprises a transmitting section according to claim 3, said scanning means two-dimensionally scans said light-emitting element and two-dimensionally scans said light-detecting element.

7. The wireless optical system according to claim 4, wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the transmission light and the received light are transmitted and received through said common condenser lens.

8. The wireless optical system according to claim 5, wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the said transmission light and the received light are transmitted and received through said common condenser lens.

9. The wireless optical system according to claim 6,

wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the said transmission light and the received light are transmitted and received through said common condenser lens.

10. The wireless optical system according to claim 5, wherein said light-detecting element includes a plurality of light-detecting cells arranged in a two-dimensional array, and

said control means drives said scanning means to limit said light-detecting cells to one or a small number of cells which receive light among the plurality of light-detecting cells.

11. The wireless optical system according to claim 6, wherein said light-detecting element includes a plurality of light-detecting cells arranged in a two-dimensional array, and

said control means drives said scanning means to limit said light-detecting cells to one or a small number of cells which receive light among the plurality of light-detecting cells.

12. The wireless optical system according to claim 10 or 11, wherein the plurality of light-detecting cells are configured from a plurality of CCDs or MOS elements.

13. The wireless optical system according to claim 10 or 11, wherein the plurality of light-detecting cells are configured from a plurality of photodiodes or avalanche photodiodes.

14. The wireless optical system according to claim 4, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is configured from a single light detecting element which is equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

15. The wireless optical system according to claim 5, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is configured from a single light detecting element which is equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

16. The wireless optical system according to claim 6, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is configured from a single light detecting element which is equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

17. The wireless optical system according to claim 4, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is constituted from a pair of light detecting elements which are equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

18. The wireless optical system according to claim 5, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is constituted from a pair of light detecting elements which are equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

19. The wireless optical system according to claim 6, wherein said light-detecting element is disposed in vicinity of a focal point of said received light condenser lens, and is constituted from a pair of light detecting elements which are equal in size to a diameter of a light-condensed spot formed by said received light condenser lens.

20. The wireless optical system according to claim 4, wherein said light-emitting element is formed to be stacked on said light-detecting element.

21. The wireless optical system according to claim 5, wherein said light-emitting element is formed to be stacked on said light-detecting element.

22. The wireless optical system according to claim 6, wherein said light-emitting element is formed to be stacked on said light-detecting element.

23. The wireless optical system according to claim 14, wherein

said scanning means periodically wobbles a position of said single light detecting element; and

said control means generates a positional error

signal pertaining to a transmission direction of a counterpart device by means of detecting the received light in synchronization with a wobbling cycle of said single light detecting element, and optimizes transmission and reception directions based on the positional error signal.

24. The wireless optical system according to claim 15, wherein

said scanning means periodically wobbles a position of said single light detecting element; and

said control means generates a positional error signal pertaining to a transmission direction of a counterpart device by means of detecting the received light in synchronization with a wobbling cycle of said single light detecting element, and optimizes transmission and reception directions based on the positional error signal.

25. The wireless optical system according to claim 16, wherein

said scanning means periodically wobbles a position of said single light detecting element; and

said control means generates a positional error signal pertaining to a transmission direction of a counterpart device by means of detecting the received light in synchronization with a wobbling cycle of said single

light detecting element, and optimizes transmission and reception directions based on the positional error signal.

26. An optical wireless system which communicates between a master device and a slave device, wherein

said master device and said slave device respectively comprise a transmitting section having a light-emitting element and a transmission light condenser lens, and a receiving section having a light-detecting element and a received-light condenser lens, and

at least one of said master device and said slave device comprises:

scanning means which two-dimensionally scans said light-emitting element relative to said transmission light condenser lens, and two-dimensionally scans said light-detecting element relative to said received light condenser lens;

measuring means which measures a transmission direction of the transmission light transmitted from said master device or said slave device on the other end; and

control means which drives said scanning means to control a transmission direction of the transmission light transmitted from said light-emitting element and a reception direction of the received light received by said light-detecting element based on measurement result of said

measuring means .

27. The wireless optical system according to claim 26, wherein said light-emitting elements of said master device and said slave device emit the transmission light at different wavelengths.

28. The wireless optical system according to claim 27, wherein said light-emitting element of said slave device emits the transmission light at a wavelength which is shorter than that of the transmission light emitted from said light-emitting element of said master device.

29. The wireless optical system according to claim 27, wherein said light-emitting element of said master device emits the transmission light having a wavelength of 1.4 to 1.6 μm, and

said light-emitting element of said slave device emits the transmission light having a wavelength of 0.8 to 1 μm.

30. The wireless optical system according to claim 26, wherein at least one of said master device and said slave device detects a direction of the transmission light emitted from said master device or said slave device on the

other end, and communicates by transmitting the transmission light in the direction of the transmission light.

31. The wireless optical system according to claim 26, wherein said slave device two-dimensionally scans said light-emitting element, and

said master device measures a direction of the transmission light and communicates by transmitting the transmission light in the direction.

32. The wireless optical system according to claim 1, wherein said control means also controls a directional angle of the transmission light by means of driving said scanning means.

33. The wireless optical system according to claim 3, wherein said control means also controls a directional angle of the transmission light by means of driving said scanning means.

34. The wireless optical system according to claim 2, wherein said control means also controls a directional angle of the received light by means of driving said scanning means.

35. The wireless optical system according to claim 3, wherein said control means also controls a directional angle of the received light by means of driving said scanning means.

36. The wireless optical system according to claim 1, wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the transmission light transmitted from said light-emitting element and the received light received by said light-detecting element are transmitted and received through said common condenser lens.

37. The wireless optical system according to claim 2, wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the transmission light transmitted from said light-emitting element and the received light received by said light-detecting element are

transmitted and received through said common condenser lens.

38. The wireless optical system according to claim 3, wherein one common condenser lens is used as both said transmission light condenser lens and said received light condenser lens, and

said light-emitting element and said light-detecting element are disposed such that the transmission light transmitted from said light-emitting element and the received light received by said light-detecting element are transmitted and received through said common condenser lens.

39. The wireless optical system according to claim 1, wherein said light-emitting element is disposed in vicinity of a position of a focal point of said transmission light condenser lens,

said scanning means supports said light-emitting element in a three-dimensionally movable manner, and

said control means controls a transmission direction and a directional angle of the transmission light, by means of driving said scanning means to three-dimensionally move said light-emitting element.

40. The wireless optical system according to claim 3, wherein said light-emitting element is disposed in vicinity of a position of a focal point of said transmission light condenser lens,

said scanning means supports said light-emitting element in a three-dimensionally movable manner, and

said control means controls a transmission direction and a directional angle of the transmission light, by means of driving said scanning means to three-dimensionally move said light-emitting element.

41. The wireless optical system according to claim 2, wherein said light-detecting element is disposed in vicinity of a position of a focal point of said received light condenser lens,

said scanning means supports said light-detecting element in a three-dimensionally movable manner, and

said control means controls a reception direction and a directional angle of the received light, by means of driving said scanning means to three-dimensionally move said light-detecting element.

42. The wireless optical system according to claim 3, wherein said light-detecting element is disposed in vicinity of a position of a focal point of said received

light condenser lens,

said scanning means supports said light-detecting element in a three-dimensionally movable manner, and

said control means controls a reception direction and a directional angle of the received light, by means of driving said scanning means to three-dimensionally move said light-detecting element.

43. The wireless optical system according to claim 2, wherein said light-detecting element includes a plurality of light-detecting cells arranged in a two-dimensional array, and

said control means drives said scanning means to limit said light-detecting cells to one or a small number of cells which receive light among the plurality of light-detecting cells.

44. The wireless optical system according to claim 3, wherein said light-detecting element includes a plurality of light-detecting cells arranged in a two-dimensional array, and

said control means drives said scanning means to limit said light-detecting cells to one or a small number of cells which receive light among the plurality of light-detecting cells.

45. An optical wireless system which communicates between a master device and a slave device, wherein

said master device and said slave device respectively comprise a transmitting section having a light-emitting element and a transmission light condenser lens, and a receiving section having a light-detecting element and a received-light condenser lens, and

at least one of said master device and said slave device comprises:

scanning means which scans said light-emitting element relative to said transmission light condenser lens, and scans said light-detecting element relative to said received light condenser lens; and

control means which drives said scanning means to control said transmission direction of the transmission light transmitted from said light-emitting element and a reception direction of the received light received by said light-detecting element.

46. The wireless optical system according to claim 45, wherein said transmitting section of at least one of said master device and said slave device transmits transmission light having a wide directional angle, and

said receiving section of a remaining device receives

the transmission light having a wide directional angle, and starts a communication with said transmitting section.

47. The wireless optical system according to claim 45, wherein said transmitting section of at least one of said master device and said slave device transmits transmission light having a wide directional angle, and

said receiving section of a remaining device receives the transmission light having a wide directional angle, and starts a communication with said transmitting section, and

wherein, subsequently, said transmitting section or said receiving section performs the communication by means of narrowing a directional angle of the transmission light or the received light.